

Massachusetts Department of Environmental Protection Source Water Assessment and Protection (SWAP) Report for

Sturbridge Water Department

What is SWAP?

The Source Water Assessment and Protection (SWAP) program, established under the federal Safe Drinking Water Act, requires every state to:

- inventory land uses within the recharge areas of all public water supply sources;
- assess the suscepti bility of drinking water sources to contamination from these land uses: and
- publicize the results to provide support for improved protection.

Susceptibility and Water Quality

Susceptibility is a measure of a water supply's potential to become contaminated due to land uses and activities within its recharge area.

A source's susceptibility to contamination does *not* imply poor water quality.

Water suppliers protect drinking water by monitoring for more than 100 chemicals, disinfecting, filtering, or treating water supplies, and using source protection measures to ensure that safe water is delivered to the tap.

Actual water quality is best reflected by the results of regular water tests. To learn more about your water quality, refer to your water supplier's annual Consumer Confidence Reports.

Table 1: Public Water System Information

PWS Name	Sturbridge Water Department			
PWS Address	Water Works Drive			
City/Town	Sturbridge, Massachusetts			
PWS ID Number	2287000			
Local Contact	Paul Donahue			
Phone Number	(508) 347-2513			

Introduction

We are all concerned about the quality of the water we drink. Drinking water wells may be threatened by many potential contaminant sources, including storm runoff, road salting, and improper disposal of hazardous materials. Citizens and local officials can work together to better protect these drinking water sources.

Purpose of this report:

This report is a planning tool to support local and state efforts to improve water supply protection. By identifying land uses within water supply protection areas that may be potential sources of contamination, the assessment helps focus protection efforts on appropriate best management practices (BMPs) and drinking water source protection measures.

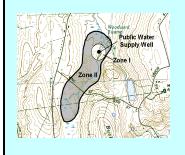
Refer to Table 3 for Recommendations to address potential sources of contamination. Department of Environmental Protection (DEP) staff are available to provide information about funding and other resources that may be available to your community.

This report includes the following sections:

- 1. Description of the Water System
- 2. Land Uses within Protection Areas
- 3. Source Water Protection Conclusions and Recommendations
- 4. Appendices

What is a Protection Area?

A well's water supply protection area is the land around the well where protection activities should be focused. Each well has a Zone I protective radius and a Zone II protection area.



Glossary

Aquifer: An underground waterbearing layer of permeable material that will yield water in a usable quantity to a well.

Hydrogeologic Barrier: An underground layer of impermeable material (i.e. clay) that resists penetration by water.

Recharge Area: The surface area that contributes water to a well.

Zone 1: The area closest to a well; a 100 to 400 foot radius proporti onal to the well's pumping rate. This area should be owned or controlled by the water supplier and limited to water supply activities.

Zone II: The primary recharge area for the aquifer. This area is defined by hydrogeologic studies that must be approved by DEP. Refer to the attached map to determine the land within your Zone II.

Section 1: Description of the Water System

Zone II #: 574 Susceptibility: High

Well Names	Source IDs
Well #1	2287000-01G
Well #2	2287000-02G
Well #3	2287000-03G

Sturbridge Water Department obtains its water supply from three wells (Well #1, Well #2 & Well #3) in one Zone II. The wells are located south of Route 20, east of Old Sturbridge Village and between 130 and 500 feet from the east bank of the Quinebaug River. Well #1 is a 56-foot deep, 24-inch diameter gravel packed inactive well. Well #2 is a 63 foot deep, 18-inch diameter well. Well #3 is a 76 foot deep, 18-inch diameter well. Each well has a Zone I of 400 feet. The wells are located in an aquifer with a high vulnerability to contamination due to the absence of hydrogeologic barriers (i.e. clay) that can prevent contaminant migration. Please refer to the attached map to view the boundaries of the Zone II.

The water goes through greensand filtration for iron and manganese removal, calcium hydroxide is added for pH adjustment, calcium hypochlorite is added as a disinfectant, and the water is fluoridated for dental health. For current information on monitoring results and treatment, please contact the Public Water System contact person listed above in Table 1 for a copy of the most recent Consumer Confidence Report. Drinking water monitoring reporting data are also available on the web at http://www.epa.gov/safewater/ccr1.html.

Section 2: Land Uses in the Protection Areas

The Zone II for Sturbridge is a mixture of forest, residential, commercial, and light industrial land uses (refer to attached map for details). Land uses and activities that are potential sources of contamination are listed in Table 2, with further detail provided in the Table of Regulated Facilities and Table of Underground Storage Tanks in Appendix B.

Key Land Uses and Protection Issues include:

- 1. Inappropriate activities in Zone I
- 2. Residential land uses
- 3. Transportation corridors
- 4. Hazardous materials storage and use
- 5. Oil or hazardous material contamination sites
- 6. Agricultural activities
- 7. Comprehensive wellhead protection planning

The overall ranking of susceptibility to contamination for the system is high, based on the presence of at least one high threat land use within the water supply protection areas, as seen in Table 2.

1. Inappropriate Activities in Zone Is – The Zone I for each of the wells is a 400 foot radius around the wellhead. Massachusetts drinking water regulations (310 CMR 22.00 Drinking Water) requires public water suppliers to own the Zone I, or control the Zone I through a conservation restriction. The three (3)

Zone Is for the wells are not owned or controlled by the public water system. Only water supply activities are allowed in the Zone I. However, many public water supplies were developed prior to the Department's regulations and contain non water supply activities such as homes and public roads. There are no non water supply activities in the Zone Is.

Zone I Recommendations:

- ✓ To the extent possible, remove all non water supply activities from the Zone Is to comply with DEP's Zone I requirements.
- ✓ Use BMPs for the storage, use, and disposal of hazardous materials such as water supply chemicals and maintenance chemicals.
- Do not use or store pesticides, fertilizers or road salt within the Zone
- ✓ Keep any new non water supply activities out of the Zone I.
- **2. Residential Land Uses** Approximately 22% of the Zone II consists of residential areas. Only some of the areas have public sewers, and so the remainder use septic systems. If managed improperly, activities associated with residential areas can contribute to drinking water contamination. Common potential sources of contamination include:
- Septic Systems Improper disposal of household hazardous chemicals to septic systems is a potential source of contamination to the groundwater because septic systems lead to the ground. If septic systems fail or are not properly maintained they can be a potential source of microbial contamination.
- Household Hazardous Materials Hazardous materials may include automotive wastes, paints, solvents, pesticides, fertilizers, and other substances. Improper use, storage, and disposal of chemical products used in homes are potential sources of contamination.
- **Heating Oil Storage** If managed improperly, Underground and Aboveground Storage Tanks (UST and AST) can be potential sources of contamination due to leaks or spills of the fuel oil they store.
- Stormwater Catch basins transport stormwater from roadways and adjacent properties to the ground. As flowing stormwater travels, it picks up debris and contaminants from streets and lawns. Common potential contaminants include lawn chemicals, pet waste, and contaminants from

Benefits of Source Protection

Source Protection helps protect public health and is also good for fiscal fitness:

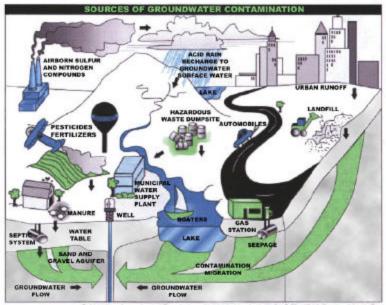
- Protects drinking water quality at the source
- Reduces monitoring costs through the DEP Waiver Program
- Treatment can be reduced or avoided entirely, saving treatment costs
- Prevents costly contamination clean-up
- Preventing contamination saves costs on water purchases, and expensive new source development

Contact your regional DEP office for more information on Source Protection and the Waiver Program.

automotive leaks, maintenance, washing, or accidents.

Residential Land Use Recommendations:

- ✓ Educate residents on best management practices (BMPs) for protecting water supplies. Distribute the fact sheet "Residents Protect Drinking Water" available in Appendix A and on www. mass.gov/dep/brp/dws/protect.htm, which provides BMPs for common residential issues.
- ✓ Work with planners to control new residential developments in the water supply protection areas.
- ✓ Promote BMPs for stormwater management and pollution controls.
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3. Transportation Corridors - Route 20, Route 84 and Route 131 run through the Zone II. Local roads are common throughout the Zone II. Roadway construction, maintenance, and typical highway use can all be potential sources of contamination. Accidents can lead to spills of gasoline and other potentially dangerous transported chemicals. Roadways are frequent sites for illegal dumping of hazardous or other potentially harmful wastes. De-icing salt, automotive chemicals and other debris on roads are picked up by stormwater and wash in to catchbasins.

Transportation Corridor Recommendations:

- ✓ Identify stormwater drains and the drainage system along transportation corridors. Wherever possible, ensure that drains discharge stormwater outside of the Zone II.
- ✓ Work with the Town and State to have catch basins inspected, maintained, and cleaned on a regular schedule. Street sweeping reduces the amount of potential contaminants in runoff.
- ✓ Work with local emergency response teams to ensure that any spills within the Zone II can be effectively contained.
- ✓ If storm drainage maps are available, review the maps with emergency response teams. If maps aren't yet available, work with town officials to investigate mapping options such as the upcoming Phase II Stormwater Rule requiring some communities to complete stormwater mapping.
- **4. Hazardous Materials Storage and Use** Thirteen percent of the land area within the Zone II is commercial or industrial land uses. Many small businesses and industries use hazardous materials, produce hazardous waste products, and/or store large quantities of hazardous materials in UST/AST. If hazardous materials are improperly stored, used, or disposed, they become potential sources of contamination. Hazardous materials should <u>never</u> be disposed of to a septic system or floor drain leading directly to the ground.

Hazardous Materials Storage and Use Recommendations:

✓ Educate local businesses on best management practices for protecting water supplies. Distribute the fact sheet "Businesses Protect Drinking Water"

- available in Appendix A and on www.mass. gov/dep/brp/dws/protect.htm, which provides BMP's for common business issues.
- ✓ Work with local businesses to register those facilities that are unregistered generators of hazardous waste or waste oil. Partnerships between businesses, water suppliers, and communities enhance successful public drinking water protection practices.
- ✓ Educate local businesses on floordrain requirements for Massachusetts . See brochure "Industrial Floor Drains" for more information.
- **5.** Presence of Oil or Hazardous Material Contamination Sites The Zone II contains DEP Tier Classified Oil and/or Hazardous Material Release Sites indicated on the map as Release Tracking Numbers 2-00101, 2-0010905, and 2-001090. Refer to the attached map and Appendix 3 for more information.

(Continued on page 7)

What are "BMPs?"

Best Management Practices (BMPs) are measures that are used to protect and improve surface water and groundwater quality. BMPs can be <u>structural</u>, such as oil & grease trap catch basins, <u>nonstructural</u>, such as hazardous waste collection days or <u>managerial</u>, such as employee training on proper disposal procedures.

For More Information

Contact Josephine Yemoh-Ndi in DEP's Worcester Office at (508) 792-7650 for more information and assistance on improving current protection measures.

Copies of this report have been provided to the public water supplier, board of health, and the town.

Source Protection Decreases Risk

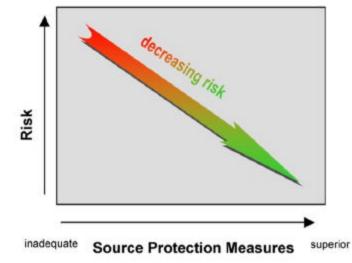


Figure 2: Risk of contamination decreases as source protection increases. This is true for public water systems of any susceptibility ranking, whether High, Moderate, or Low.

Potential Source of Contamination vs. Actual Contamination

The activities listed in Table 2 are those that typically use, produce, or store contaminants of concern, which, <u>if managed improperly</u>, are potential sources of contamination (PSC).

It is important to understand that a release may never occur from the potential source of contamination provided facilities are using best management practices (BMPs). If BMPs are in place, the actual risk may be lower than the threat ranking identified in Table 2. Many potential sources of contamination are regulated at the federal, state and/or local levels, to further reduce the risk.

Table 2: Land Use in the Protection Areas (Zones I and II)

For more information, refer to Appendix B: Regulated Facilities within the Water Supply Protection Area

Activities	Quantity	Threat*	Potential Source of Contamination	
Agricultural				
Forestry Operation	1	L	Herbicides or pesticides, equipment maintenance materials: leaks, spills, or improper handling; road building	
Livestock Operations	2	M	Manure (microbial contaminants): improper handling	
Landscaping	1	М	Fertilizers and pesticides: leaks, spills, improper handling, or over-application	
Commercial				
Cemeteries	1	М	Over-application of pesticides: leaks, spills, improper handling; historic embalming fluids	
Furniture Stripping and Refinishing	1	Н	Hazardous chemicals: spills, leaks, or improper handling	
Gas Stations/ Service Stations	3	Н	Automotive fluids and fuels: spills, leaks, or improper handling or storage	
Laundromats	1	L	Wash water: improper management	
Medical Facilities	1	М	Biological, chemical, and radioactive wastes: spills, leaks, improper handling or storage	
Industrial				
Chemical Manufacture Or Storage	2	Н	Chemicals and process wastes: spills, leaks, or improper handling or storage	
Foundries Or Metal Fabricators	2	Н	Solvents and other chemicals: spills, leaks, or improper handling or storage	
Hazardous Materials Storage	2	Н	Hazardous materials: spills, leaks, or improper handling or storage	
Residential				
Fuel Oil Storage (at residences)	Many	М	Fuel oil: spills, leaks, or improper handling	

^{*} See Table 2 Notes on Page 10

Table 2: Land Use in the Protection Areas (Zones I and II) (Continued)

Activities	Quantity	Threat*	Potential Source of Contamination
Residential (cont'd)			
Lawn Care / Gardening	Many	M	Pesticides: over-application or improper storage and disposal
Septic Systems / Cesspools	Many	М	Hazardous chemicals: microbial contaminants, and improper disposal
Miscellaneous			
Aboveground Storage Tanks	1	M	Materials stored in tanks: spills, leaks, or improper handling
Aquatic Wildlife	3	L	Microbial contaminants
Fire Training Facilities	1	M	Fuels and other chemicals: improper use or storage
Fishing/Boating	2	L	Fuel and other chemical spills, microbial contaminants
NPDES Locations	1	L	Hazardous material and wastes: improper disposal
Oil or Hazardous Material Sites	3		Tier Classified Oil or Hazardous Materials Sites are not ranked due to their site-specific character. Individual sites are identified in Appendix B.
Pipeline (Oil or Sewer)	1	M	Oil or sewage: spills or leaks
Road And Maintenance Depots	1	M	Deicing materials, automotive fluids, fuel storage, and other chemicals: spills, leaks, or improper handling or storage
Schools, Colleges, and Universities	1	М	Fuel oil, laboratory, art, photographic, machine shop, and other chemicals: spills, leaks, or improper handling or storage
Small quantity hazardous waste generators	1	M	Hazardous materials and waste: spills, leaks, or improper handling or storage
Stormwater Drains/ Retention Basins	20	L	Debris, pet waste, and chemicals in stormwater from roads, parking lots, and lawns
Transmission Line Rights- of-Way	1	L	Corridor maintenance pesticides: over-application or improper handling; construction
Transportation Corridors	3	M	Fuels and other hazardous materials: accidental leaks or spills; pesticides: over-application or improper handling
Underground Storage Tanks	4	Н	Stored materials: spills, leaks, or improper handling
Utility Substation Transformers	1	L	Chemicals and other materials including PCBs: spills, leaks, or improper handling
Very Small Quantity Hazardous Waste Generator	5	L	Hazardous materials and waste: spills, leaks, or improper handling or storage
Water Treatment Sludge Lagoon	1	М	Sludge and wastewater: improper management

^{*} See Table 2 Notes on Page 10

Oil or Hazardous Material Contamination Sites Recommendation:

- Monitor progress on any ongoing remedial action conducted for the known oil or contamination sites.
- **6. Agricultural Activities** There are two livestock operation in the of the Zone II. If not contained or applied properly, animal waste from barnyards, manure pits and field application are potential sources of contamination to ground and surface water.

Agricultural Activities Recommendation:

- Work with farmers in your protection areas to make them aware of your water supply and to encourage the use of a US Natural Resources Conservation Service farm plan to protect water supplies.
- **7. Protection Planning** Currently, the Town does not have water supply protection controls that meet DEP's Wellhead Protection regulations 310 CMR 22.21(2). Protection planning protects drinking water by managing the land area that supplies water to a well. A Wellhead Protection Plan coordinates community efforts, identifies protection strategies, establishes a timeframe for implementation, and provides a forum for public participation. There are resources available to help communities develop a plan for protecting drinking water supply wells.

Protection Planning Recommendations:

- ✓ Develop a Wellhead Protection Plan. Establish a protection team, and refer them to http://mass.gov/dep/brp/dws/protect.htm for a copy of DEP's guidance, "Developing a Local Wellhead Protection Plan".
- ✓ Coordinate efforts with local officials to compare local wellhead protection controls with current MA Wellhead Protection Regulations 310 CMR 22.21 (2). If there are no local controls or they do not meet the current regulations, adopt controls that meet 310 CMR 22.21(2). For more information on DEP land use controls see http://mass.gov/dep/brp/dws/protect.htm.
- ✓ If local controls do not regulate floordrains, be sure to include floordrain controls that meet 310 CMR 22.21(2).
- ✓ Work with town boards to review and provide recommendations on proposed development within your water supply protection areas. To obtain

Top 5 Reasons to Develop a Local Wellhead Protection Plan

- Reduces Risk to Human Health
- Cost Effective! Reduces or Eliminates Costs Associated With:
- Increased groundwater monitoring and treatment
- Water supply clean up and remediation
- Replacing a water supply
- Purchasing water
- Supports municipal bylaws, making them less likely to be challenged
- Ensures clean drinking water supplies for future generations
- **9** Enhances real estate values clean drinking water is a local amenity. A community known for its great drinking water in a place people want to live and businesses want to locate.



information on build-out analyses for the town, see the Executive Office of Environmental Affairs' community preservation web site, http://commpres.env.state.ma.us/.

Other land uses and activities within the Zone II that include furniture stripping and refinishing, gas stations, and schools. Refer to Table 2 and Appendix 2 for more information about these land uses.

Identifying potential sources of contamination is an important initial step in protecting your drinking water sources. Further local investigation will provide more in-depth information and may identify new land uses and activities that are potential sources of contamination. Once potential sources of contamination are identified, specific recommendations like those below should be used to better protect your water supply.

Table 3: Current Protection and Recommendations

Protection Measures	Status	Recommendations
Zone I		
Does the Public Water Supplier (PWS) own or control the entire Zone I?	NO	Follow Best Management Practices (BMP's) that focus on good housekeeping, spill prevention, and operational practices to reduce the use and release of hazardous materials.
Is the Zone I posted with "Public Drinking Water Supply" Signs?	YES	Additional economical signs are available from the Northeast Rural Water Association (802) 660-4988.
Is Zone I regularly inspected?	YES	Continue daily inspections of drinking water protection areas.
Are water supply-related activities the only activities within the Zone I?	YES	Continue monitoring non-water supply activities in Zone Is.
Municipal Controls (Zoning Bylaws, He	alth Regula	tions, and General Bylaws)
Does the municipality have Wellhead Protection Controls that meet 310 CMR 22.21(2)?	YES	The Town does not have an "Aquifer Protection District" bylaw that meets DEP's requirements for wellhead protection. Refer to www.state.ma.us/dep/brp/dws/ for model bylaws and health regulations, and current regulations.
Do neighboring communities protect the Zone II areas extending into their communities?	N/A	
Planning		
Does the PWS have a Wellhead Protection Plan?	YES	Develop a wellhead protection plan. Follow "Developing a Local Wellhead Protection Plan" available at: www.state. ma.us/dep/brp/dws/.
Does the PWS have a formal "Emergency Response Plan" to deal with spills or other emergencies?	YES	Augment plan by developing a joint emergency response plan with fire department, Board of Health, DPW, and local and state emergency officials. Coordinate emergency response drills with local teams.
Does the municipality have a wellhead protection committee?	NO	Establish committee; include representatives from citizens' groups, neighboring communities, and the business community.
Does the Board of Health conduct inspections of commercial and industrial activities?	YES	For more guidance see "Hazardous Materials Management: A Community's Guide" at www.state.ma.us/ dep/brp/dws/files/hazmat.doc
Does the PWS provide wellhead protection education?	YES	Aim additional efforts at commercial, industrial and municipal uses within the Zone II.

Section 3: Source Water Protection Conclusions and Recommendations

Current Land Uses and Source Protection:

As with many water supply protection areas, the system Zone II contains potential sources of contamination. However, source protection measures reduce the risk of actual contamination, as illustrated in Figure 2. The water supplier is commended for taking an active role in promoting source protection measures in the Water Supply Protection Areas through:

- Taking an active role in the preservation of land in the Zone II as open space.
- Providing round the clock surveillance.

Source Protection Recommendations:

To better protect the sources for the future:

- ✓ Inspect the Zone I regularly, and when feasible, remove any non-water supply activities.
- ✓ Educate residents on ways they can help you to protect drinking water sources
- ✓ Work with emergency response teams to ensure that they are aware of the stormwater drainage in your Zone II and to cooperate on responding to spills or accidents.
- ✓ Partner with local businesses to ensure the proper storage, handling, and disposal of hazardous materials.
- ✓ Monitor progress on any ongoing remedial action conducted for the known oil or contamination sites.
- ✓ Work with farmers in your protection areas to make them aware of your water supply and to encourage the use of a NRCS farm plan to protect water supplies.
- ✓ Develop and implement a Wellhead Protection Plan.

Conclusions:

These recommendations are only part of your ongoing local drinking water source protection. Additional source protection recommendations are listed in Table 3, the Key Issues above and Appendix A.

DEP staff, informational documents, and resources are available to help you build on this SWAP report as you continue to improve drinking water protection in your community. The Department's Wellhead Protection Grant Program and Source Protection Grant Program provide funds to assist public water suppliers in addressing water supply source protection through local projects. Protection recommendations discussed in this document may be eligible for funding under the Grant Program. Please note: each spring DEP posts a new Request for Response for the grant program (RFR).

Other grants and loans are available through the Drinking Water State Revolving Loan Fund, the Clean Water State Revolving Fund, and other sources. For more information on grants and loans, visit the Bureau of Resource Protection's Municipal Services web site at: http://mass.gov/dep/brp/mf/mfpubs.htm.

The assessment and protection recommendations in this SWAP report are provided as a tool to encourage community discussion, support ongoing source protection efforts, and help set local drinking water protection priorities. Citizens and community officials should use this SWAP report to spur discussion of local drinking water protection measures. The water supplier should supplement this SWAP report with local information on potential sources of contamination and

What is a Zone III?

A Zone III (the secondary recharge area) is the land beyond the Zone II from which surface and ground water drain to the Zone II and is often coincident with a watershed boundary.

The Zone III is defined as a secondary recharge area for one or both of the following reasons:

- The low permeability of underground water bearing materials in this area significantly reduces the rate of groundwater and potential contaminant flow into the Zone II.
- 2. The groundwater in this area discharges to a surface water feature such as a river, rather than discharging directly into the aquifer.

The land uses within the Zone III are assessed only for sources that are shown to be groundwater under the direct influence of surface water.

Additional Documents:

To help with source protection efforts, more information is available by request or online at mass.gov/dep/brp/dws including:

- 1. Water Supply Protection Guidance Materials such as model regulations, Best Management Practice information, and general water supply protection information.
- 2. MA DEP SWAP Strategy
- 3. Land Use Pollution Potential Matrix
- 4. Draft Land/Associated Contaminants Matrix

land uses. Local information should be maintained and updated periodically to reflect land use changes in the Zone II. Use this information to set priorities, target inspections, focus education efforts, and to develop a long-term drinking water source protection plan.

Section 4: Appendices

- A. Protection Recommendations
- B. Regulated Facilities within the Water Supply Protection Area
- C. Table of Tier Classified Oil and/or Hazardous Material Sites within the Water Supply Protection Areas
- D. Additional Documents on Source Protection

Table 2 Notes:

- 1. When specific potential contaminants are not known, typical potential contaminants or activities for that type of land use are listed. Facilities within the watershed may not contain all of these potential contaminant sources, may contain other potential contaminant sources, or may use Best Management Practices to prevent contaminants from reaching drinking water supplies.
- 2. For more information on regulated facilities, refer to Appendix B: Regulated Facilities within the Water Supply Protection Area information about these potential sources of contamination.
- 3. For information about Oil or Hazardous Materials Sites in your protection areas, refer to Appendix C: Tier Classified Oil and/or Hazardous Material Sites.
- * THREAT RANKING The rankings (high, moderate or low) represent the relative threat of each land use compared to other PSCs. The ranking of a particular PSC is based on a number of factors, including: the type and quantity of chemicals typically used or generated by the PSC; the characteristics of the contaminants (such as toxicity, environmental fate and transport); and the behavior and mobility of the pollutants in soils and groundwater.

APPENDIX B: REGULATED FACILITIES WITHIN THE WATER SUPPLY PROTECTION AREA

DEP Permitted Facilities

DEP Facility Number	Facility Name	Street Address	Town	Permitted Activity	Activity Class
361248	BILL CORMIER	1 MCGREGORY RD	STURBRIDGE	Generator of Hazardous Waste	Very Small Quantity Generator of Waste Oil/PCBs
51195	BURGESS ELEMENTARY SCHOOL	OFF CEDAR ST	STURBRIDGE	PLANT	Air Quality Permit
339372	BURLE ELECTRO OPTICS	STURBRIDGE INDUSTRIAL PK	STURBRIDGE	Generator of Hazardous Waste	Small Quantity Generator of Hazardous Waste
131208	CPC ENGINEERING CORP	441 MAIN ST P O BOX 36	STURBRIDGE	Toxic Use Reduction Filer	Large Quantity Toxic User
136802	CUMBERLAND FARM	506 MAIN ST	STURBRIDGE	Fuel Dispenser	Fuel Dispenser
305003	MASS HIGHWAY SITE 44	ROUTES 20 & 131	STURBRIDGE	Fuel Dispenser	Fuel Dispenser
271066	MA STATE POLICE	ROUTE 20	STURBRIDGE	Air Quality Permit	Air Quality Permit
278565	MASS HIGHWAY	ROUTES 20 & 131	STURBRIDGE	Generator of Hazardous Waste	Very Small Quantity Generator of Hazardous Waste
278565	MASS HIGHWAY	ROUTES 20 & 131	STURBRIDGE	Generator of Hazardous Waste	Very Small Quantity Generator Waste Oil/PCBs
368180	Mobil 17898	365 MAIN ST	STURBRIDGE	Fuel Dispenser	Fuel Dispenser

DEP Facility Number	Facility Name	Street Address	Town	Permitted Activity	Activity Class
192196	MOBIL OIL CORP SS GX5	MAIN ST & ROUTE 20	STURBRIDGE	Generator of Hazardous Waste	Very Small Quantity Generator of Hazardous Waste
192196	MOBIL OIL CORP SS GX5	MAIN ST & ROUTE 20	STURBRIDGE	Generator of Hazardous Waste	Very Small Quantity Generator Waste Oil/PCBs
363172	OLD STURBRIDGE VILLAGE INC	1 OLD STURBRIDGE VILLAGE RD	STURBRIDGE	Generator of Hazardous Waste	Very Small Quantity Generator of Hazardous Waste
130858	SOUTHBRIDGE SHEET METAL	76 MILL ST	STURBRIDGE	Toxics Use Reduction Filer	Below Toxics Use Reduction Regulated Levels
130858	SOUTHBRIDGE SHEET METAL	76 MILL ST	STURBRIDGE	PLANT	Air Quality Permit
283763	SOUTHBRIDGE SHEET METAL	441 MAIN ST	STURBRIDGE	Toxics Use Reduction Filer	Large Quantity Toxics User
283763	SOUTHBRIDGE SHEET METAL	441 MAIN ST	STURBRIDGE	Generator of Hazardous Waste	Small Quantity Generator of Hazardous Waste
283763	SOUTHBRIDGE SHEET METAL	441 MAIN ST	STURBRIDGE	Generator of Hazardous Waste	Very Small Quantity Generator Waste Oil/PCBs
320486	TOM PETROFSKY DBA HEARTH.	453 MAIN ST	STURBRIDGE	Generator of Hazardous Waste	Small Quantity Generator of Hazardous Waste
365646	VILLAGE XTRA MART	400 MAIN ST	STURBRIDGE	Fuel Dispenser	Fuel Dispenser
131208	WHEELABRATOR CPC	441 MAIN ST	STURBRIDGE	Generator of Hazardous Waste	Very Small Quantity Generator Waste Oil/PCBs
204920	WHEELABRATOR ENG. SYS. INC	HOLLAND RD	STURBRIDGE	Generator of Hazardous Waste	Below Hazardous Waste Regulated Levels

DEP Facility Number	Facility Name	Street Address	Town	Permitted Activity	Activity Class
204920	WHEELABRATOR ENG. SYS. INC	HOLLAND RD	STURBRIDGE	Groundwater or Sewer Discharge	Below Industrial Waste Regulated Levels
131208	WHEELABRATOR CPC	441 MAIN ST	STURBRIDGE	Groundwater or Sewer Discharge	Below Industrial Waste Regulated Levels
204920	WHEELABRATOR ENG. SYS. INC	HOLLAND RD	STURBRIDGE	Toxics Use Reduction Filer	Below Toxics Use Regulated Levels

Underground Storage Tanks

Facility Name	Address	Town	Description	Tank Type	Tank Leak Detection	Capacity (gal)	Contents
MASS HIGHWAY	ROUTE 20 & 131	STURBRIDGE	STATE	2 Wall	Interstitial	6000	Gasoline
MOBIL	365 MAIN ST	STURBRIDGE	Gas Station	2 Wall	Interstitial	10000	Gasoline
VILLAGE XTRA MART	400 MAIN ST	STURBRIDGE	Gas Station	1 Wall	Intretank	8000	Gasoline

For more information on underground storage tanks, visit the Massachusetts Department of Fire Services web site: http://www.state.ma.us/dfs/ust/ustHome.htm

Note: This appendix includes only those facilities within the water supply protection area(s) that meet state reporting requirements and report to the appropriate agencies. Additional facilities may be located within the water supply protection area(s) that should be considered in local drinking water source protection planning.

APPENDIX C – Table of Tier Classified Oil and/or Hazardous Material Sites within the Water Supply Protection Areas

DEP's datalayer depicting oil and/or hazardous material (OHM) sites is a statewide point data set that contains the approximate location of known sources of contamination that have been both reported and classified under Chapter 21E of the Massachusetts General Laws. Location types presented in the layer include the approximate center of the site, the center of the building on the property where the release occurred, the source of contamination, or the location of an on-site monitoring well. Although this assessment identifies OHM sites near the source of your drinking water, the risks to the source posed by each site may be different. The kind of contaminant and the local geology may have an effect on whether the site poses an actual or potential threat to the source.

The DEP's Chapter 21E program relies on licensed site professionals (LSPs) to oversee cleanups at most sites, while the DEP's Bureau of Waste Site Cleanup (BWSC) program retains oversight at the most serious sites. This privatized program obliges potentially responsible parties and LSPs to comply with DEP regulations (the Massachusetts Contingency Plan – MCP), which require that sites within drinking water source protection areas be cleaned up to drinking water standards.

For more information about the state's OHM site cleanup process to which these sites are subject and how this complements the drinking water protection program, please visit the BWSC web page at http://www.state.ma.us/dep/bwsc. You may obtain site -specific information two ways: by using the BWSC Searchable Sites database at http://www.state.ma.us/dep/bwsc/sitelist.htm, or you may visit the DEP regional office and review the site file. These files contain more detailed information, including cleanup status, site history, contamination levels, maps, correspondence and investigation reports, however you must call the regional office in order to schedule an appointment to view the file.

The table below contains the list of Tier Classified oil and/or Hazardous Material Release Sites that are located within your drinking water source protection area.

Table 1: Bureau of Waste Site Cleanup Tier Classified Oil and/or Hazardous Material Release Sites (Chapter 21E Sites) - Listed by Release Tracking Number (RTN)

RTN	Release Site Address	Town	Contaminant Type
2-10905	ARLAND TOOL & MANUFACTURING	STURBRIDGE	Oil
2-10175	BEHIND STATE POLICE BARRACKS	STURBRIDGE	Oil
2-10907	WHEELABRATOR	STURBRIDGE	Oil

For more location information, please see the attached map. The map lists the release sites by RTN.